

**To:** Laidlaw, Tina[Laidlaw.Tina@epa.gov]; Suplee, Mike[msuplee@mt.gov]  
**From:** Blend, Jeff  
**Sent:** Fri 11/28/2014 6:35:10 PM  
**Subject:** RE: MDEQ's review of the 2012 economic analysis  
Rationale for Changes in EPA.doc

Here is another document Tina that you should have.

Jeff

**From:** Laidlaw, Tina [mailto:Laidlaw.Tina@epa.gov]  
**Sent:** Friday, November 28, 2014 9:33 AM  
**To:** Blend, Jeff; Suplee, Mike  
**Subject:** MDEQ's review of the 2012 economic analysis

Jeff,

Could you please resubmit the final version of the attached document to me as part of our review of the Montana's nutrient rule submission? I didn't see a final copy on the cd of documents that Mike included with the submission.

Thanks!

Tina

# Montana Affordability Criteria for Water Quality Standards

## Rationale for Changes made in EPA's guidance on Water Quality Standards to Suit Montana's Needs

### **Affordability Threshold**

To the percent of Median Household Income (MHI) measure, we added a Low to Medium Income Percentage Rate (LMI) Benchmark Comparison. In the EPA Guidance, any town or community with a threshold under 1% on their Municipal Preliminary Screener was done with the analysis and denied a variance. Montana DEQ allowed an exception to this rule where communities with less than 1% and a high LMI could move on to the next test. The reason is that a small number of communities may have income that is so skewed that a significant portion of the population would face substantial impact from having to pay for additional treatment even though MHI is high. An example is a resort town (e.g. Big Sky) where 60% of households are rich and the remaining 40% are relatively poor and may serve as the staff at the resort or as businesses in town.

### **Substantial Impacts--Secondary Indicators**

We dropped the 'Bond Rating' secondary indicator. Most towns in Montana do not have a bond rating. Also, those Montana towns that do have a bond rating can increase their rating by buying insurance on it, and thus it might be misleading as a measure.

We dropped the 'Overall Net Debt as Percent of Full Market Value of Taxable Property' indicator. The advisory group did not think that it was a good measure in general of a municipality's financial health, and that often the debt level had to do with either statutory requirements or other external factors not related to a town's financial health.

For the 'Unemployment' indicator, we will use Montana's unemployment average as a benchmark rather than the U.S. unemployment rate. The reason for this is that Montana's unemployment rate is often quite different from that of the U.S., and thus using the U.S. rate might skew the results.

The 'Property Tax Collection Rate' indicator was dropped. The reason for this was that it was not thought to be a good measure of community health. Collection rates could be affected by large companies protesting their taxes, for example, as has happened repeatedly in Montana. Also, the property tax collection rate has proved to be near impossible to collect for smaller towns and counties.

We added a 'Poverty Rate' indicator to Substantial Impacts. In the guidance, it was initially to be considered in Widespread Impacts, but instead, was felt to be a good

measure of community health and a good Secondary indicator. We created a histogram of the poverty rates of all towns in Montana to visually come up with break points for a “weak”, “mid-range”, and “strong” score compared to the benchmark.

We added the ‘Low to Medium Income Percentage’ indicator (LMI) to Substantial Impacts-Secondary Indicators. The advisory committee felt that in addition to the other socio-economic measures including poverty rate, that LMI would be one of the best measures of community health and a good Secondary indicator. We created a histogram of the LMI percentage rates of all towns in Montana to come up with break points for a “weak”, “mid-range”, and “strong” score compared to the benchmark. The break points were set using one standard deviation within the histogram mean for a “mid-point” score, and outside that range constituted a “weak” or “strong” score.

In the end, for Substantial Impacts-Secondary Indicators, we ended up with four socio-economic indicators and \_\_\_ town/community financial health indicator.

### **Assessment of Substantial Impacts Matrix**

For the Assessment of Substantial Impacts Matrix, the question marks in the Matrix became ‘X’s. In other words, we gave those communities falling into the X zone, the benefit of the doubt that they might experience Substantial impacts, and that they could move on to the Widespread test.

### **Widespread Impacts**

We completely changed the Widespread Impacts section to meet our needs. The advisory group suggested that the widespread impacts instructions in the EPA Guidance were too vague and included too many categories. After several iterations, we settled on five questions that the analyst would initially answer to determine if impacts were also Widespread. Those five questions were primary indicators of whether impacts would be widespread. If the five questions indicated with some certainty that impacts would be Widespread, then the analysis was done. If the five questions did not indicate with some certainty that impacts would be widespread, then the analyst could move on to the ten or so ‘secondary’ questions to further determine whether impacts would be Widespread or not. The five primary questions asked about whether having to meet standards would impact: 1) The economy in general, 2) Employment rates/jobs 3) Whether other jobs existed for those made unemployed by standards, 4) Whether population would be affected, and 5) whether there would be widespread positive benefits from meeting the standards. If there would be widespread positive benefits, then that answer could offset the other four, and make the analyst move on to the secondary questions. Of course, all analysis would still be reviewed by DEQ.